

REMARKS

This Preliminary Amendment is responsive to the Office Action dated September 28, 2001. By this Preliminary Amendment, Applicant has amended claims 2 and 7, has cancelled claims 1, 3-6 and 8-11, and has added new claims 12-20. Accordingly, claims 2, 7 and 12-20 are pending.

Claim Rejections Under Section 103

Claims 1-6 and 9 stand rejected under 35 U. S. C. Section 103(a) as being unpatentable over Yamaguchi in view of Tahara. It is unclear if the Examiner's rejection of claims 7, 8, 10 and 11 is intended to be based on Yamaguchi alone or Yamaguchi in combination with Tahara because there is inconsistency in the initial statement of the Section 103(a) rejection at page 4 and the Examiner's further comments at pages 7 and 8 concerning claims 7, 8, 10 and 11. Nonetheless, Applicant assumes that the Examiner is rejecting claims 7, 8, 10 and 11 on the basis of both the Yamaguchi and Tahara Patents.

Applicant respectfully traverses the Section 103(a) rejection and takes the position that pending claims 2, 7, and 12-20 are patentably distinguished from the Yamaguchi and Tahara Patents.

Claims 12, 16, 17, and 20 are independent claims. Claims 2 and 13-15 are dependent on claim 12, claims 18 and 19 are dependent on claim 17, and claim 7 is dependent on claim 20. Turning first to independent claim 12, it is directed to a method for decoding an image signal representing motion, the image signal being a bit stream of a coded compressed video signal. The method of claim 12 includes the following steps:

- decoding the bit stream for information defining pixel blocks,
- detecting an error in the information of one of the pixel blocks,

- **storing error information of the one of the pixel blocks in an error memory,**
- **storing, in a frame memory, video information of at least two frames which are prior to the present frame,**
- **generating, from the at least two frames, at least two predicted pixel blocks corresponding to a present pixel block in the present frame,**
- **judging if one of the at least two predicted pixel blocks corresponds to error information stored in the error memory, and**
- **based on the judging, determining if the one of the at least two predicted pixel blocks is used in reconstructing the present pixel block.**

Applicant respectfully submits that the method of decoding an image signal representing motion as defined in claim 12 is patentably distinguished from the Yamaguchi and Tahara Patents at least based on the features of (i) storing error information of one of the pixel blocks in an error memory, (ii) judging if one of the at least two predicated pixel blocks corresponds to error information stored in the error memory, and (iii) based on the judging, determining if the one of the at least two predicted pixel blocks is used in reconstructing the present pixel block (hereinafter collectively referred to as the “Reconstructing Feature” of applicant’s claimed invention). In other words, neither the Yamaguchi Patent nor the Tahara Patent teaches or suggests the Reconstructing Feature of applicant’s claimed invention.

The Yamaguchi Patent relates to motion picture error concealment, and describes a motion picture image transmission system for coding and decoding a motion picture signal in a block unit. This system includes an output section for detecting an error of received coded data and for outputting a detection signal, an identifying section for identifying a non-decodable block, and a predication section for subjecting values of pixels near the non-decodable block to motion

compensation predictions according to respective motion vectors. The system of Yamaguchi also includes a calculating section for calculating motion compensation prediction error values of the results of the prediction, a selecting section for selecting a motion vector applied to the non-decodable block, and a correcting section for correcting a decodable block by motion compensation by using the selected motion vector.

More specifically, if a block N+1 is unable to decode properly in the Yamaguchi system, the block N+1 is corrected by motion compensation using designated motion vectors. Further, the Yamaguchi system replaces the undecoded block with a previous block which is presumed to be similar to the undecoded block. However, this system of Yamaguchi is in sharp contrast to Applicant's claimed invention where, for example, a block N which has been indicated as having an error is not used in reconstructing the block N+1. Instead, in Applicant's claimed invention, a block N-1 would be used in the reconstruction as long as there was no error in that block. Thus, there is a very real difference between the method defined by Applicant's claimed invention and that discussed in the Yamaguchi Patent.

Turning to the Tahara Patent, it concerns a coding system for transmitting stereo image data, wherein an image for the left eye is disposed in odd fields and an image for the right eye is disposed in even fields. Frames F1, F2, F3, and F4 are sequentially coded in an order of I picture, B picture, P picture, and B picture. The picture in each frame is coded by adaptively switching between a frame prediction mode or field prediction mode, or a frame discrete cosine transformation mode or field discrete cosine transformation mode. Thereby, any parallax is efficiently decoded. But nowhere in the Tahara Patent is there any teaching or suggestion of the Reconstruction Feature of Applicant's claimed invention. In other words, the Tahara Patent does not rectify the deficiencies heretofore discussed with respect to the Yamaguchi Patent.

In sum, the Yamaguchi and Tahara Patents, either in combination or individually, do not teach or suggest the method of decoding an image representing motion as defined in Applicant's claim 12, to which claims 2, and 13-

15 depend. It is Applicant's contention that independent claims 16, 17, and 20 similarly include the Reconstruction Feature. Thus, all pending claims are patentably distinguished from the Yamaguchi and Tahara Patents.

In view of the foregoing remarks and amendments, Applicant respectfully submits that claims 2, 7, and 12-20 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully Submitted,



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Enclosures: Version with markings to show changes made
Petition for Extension of Time

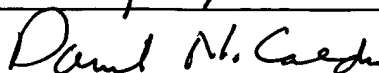
Dated: February 13, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADECLAIMS:

Claims 1, 3-6, and 8-11 have been cancelled.

1 2. (Amended) ~~A~~ The method of decoding ~~a moving~~ an image signal of
2 claim ~~1~~ 12, wherein if ~~plural~~ the predicted ~~video frames~~ pixel blocks are free from
3 decoding error,

4 the predicted ~~video frame~~ pixel blocks produced from ~~the~~ a latest decoded
5 frame ~~in time out of said predicted video frames free from decoding error~~ is used
6 in reconstruction of the present ~~processing~~ pixel block.

1 7. (Amended) ~~A moving image signal~~ The decoding apparatus of claim
2 520, wherein the ~~memory~~ means for storing stores ~~the~~ bit errors of plural video
3 frames by plotting ~~the~~ pixel blocks in which bit error is detected in each video
4 frame in a ~~map~~ form of decoding error maps.

Claims 12-20 have been newly added.